KUZ'MIN, Ivan Grigor'yevich, kand. sel'khoz. nauk; SOKOLOVA, G.S.,
    red.; SHESHNEVA, E.A., tekhn. red.

[Raising calves with nurse cows] Vyrashchivanie teliat pod
korovami-kormilitsami. Moskva, Izd-vo M-va sel'khoz. RSFSR,
1963. 38 p.   (MIRA 16:5)
        (Calves—Feeding and feeds)

KON'KOV, Yevgeniy Aristarkhovich, prof.; SOKOLOVA, G.S., red.;
      SHESHIIEVA, E.A., tekhn. red.

    [Hygiene of raising and housing calves] Gigiena vyrashchi-
    vaniia i sokhranenie teliat. 2., perer. i dop. izd. Moskva,
    Izd-vo M-va sel'khoz.RSFSR, 1963. 63 p.   (MIRA 16:12)
                    (Calves)

FEOFILOVA, Ariadna Pavlovna; LEVENSHTEYN, Mordko Leybovich; Prinimali
uchastiye: TIMOFEYEVA, Z.V.; MANUKALOVA-GREBENYUK, M.F.; INOSOVA,
K.I.; KURILOVA, K.F.; SOKOLOVA, G.U.; TYABICHENKO, O.P.; TIMOFEYEV,
P.P., otv.red.; GALUSHKO, Ia.A., red.izd-va; VOLKOVA, V.V., tekhn.red.

[Sediment and coal accumulation in the Lower and Middle Carboniferous
in the Donets Basin] Osobennosti osadko- i uglenakopleniia v nizhnem
i srednem karbone Donetskogo basseina. Moskva, Izd-vo Akad. nauk
SSSR, 1963. 174 p. (Akademiia nauk SSSR. Geologicheskii institut.
Trudy, no.73).   (MIRA 16:8)

1. Geologicheskiy institut AN SSSR (for Timofeyeva). 2. Trest
Artembeologiya (for Manukalova-Grebenyuk, Inosova, Kurilova,
Sokolova, Ryabichenko).
                (Donets Basin--Geology, Stratigraphic)
                (Donets Basin--Coal geology)

STYUNKEL', T.B.; SOKOLOVA, G.Ya.

Exchange reactions in the system $K_2H_4TeO_6$ - $MeCl_2$ - H_2O.
Part 1. Study of the systems $K_2H_4TeO_6$ - $ZnCl_2$ - H_2O and
$K_2H_4TeO_6$ - $CdCl_2$ - H_2O. Izv.vys.ucheb.zav.; khim.i khim.tekh.
8 no.4:543-548 '65.   (MIRA 18:11)

1. Kurganskiy mashinostroitel'nyy institut, kafedra obshchey
khimii.

SOKOLOVA, G.Ye.

MITROFANOV, S.I.; KUROCHKINA, A.V.; SOKOLOVA, G.Ye.

Oxidation of sodium sulfide during flotation. TSvet. met. 27 no.1:
19-23 Ja-F '54.   (MLRA 10:9)

1. Gosudarstvennyy institut tsvetnykh metallov.
              (Sodium sulfides)   (Oxidation)

SOKOLOVA, G.E.

Effect of oxygen and nitrogen on flotation of lead-zinc ores. S. I. Mitrofanov and G. E. Sokolova. Sbornik Nauch. Trudov Gosudarst. Nauch.-Issledovatel. Inst. Tsvetnykh Metal. 1955, No. 10, 52-62; Referat. Zhur., Met. 1956, No. 155.—Lab. studies were conducted on sulfide ore contg. Pb 2.3, Zn 8.1, Fe 0.5, Cu 0.02, CaO 39%, and quartz, and on a mixed ore contg. Pb 15.56, Zn 23.56, Fe 5.36, and Cu 0.049% with air, N_2, and O_2, added at the rate of 1 l./min. to a ball mill from which the air was previously evacuated; and at 5 l./min. under the impeller of a flotation cell. Replacement of air by N_2, and O_2 in flotation of Pb-Zn ores not contg. Cu is not practical. Mixing of pulp with gases for different periods of time does not change the character of enrichment curves. O_2 and air lower the effectiveness of collector, reducing the yield of concentrate. After 30 min. of aeration of pulp by air 6.7% Zn was extd. with the Pb concentrate against 10.6% Zn without air. In the presence of HS^- and S^{--} in the pulp, N_2 sharply raises the floatability of Zn minerals, depressing the floatability of Pb minerals. Rate of flotation of galenite decreases in the case of dry grinding of ore in O_2 and increases on grinding in N_2 and air.   V. N. Bednarski

SOKOLOVA, G. E.

Improving zinc concentrates. S. I. Mitrofanov and G. E. Sokolova. Sbornik Nauch. Trudov Gosudarst. Nauch.-Issledovatel. Inst. Tsvetnykh Metal. 1955, No. 10, 95–104; Referat. Zhur., Met. 1956, No. 965.—Zn concentrate can be improved by grinding the whole ore to 85–90% < 0.074 mm., sepn. of particles of rich concentrate, finish-grinding the intermediate products, and finish-grinding the entire Zn concentrate with subsequent clean up. Exptl. tests and operation under mill conditions showed the possibility of obtaining concentrates with 45% Zn and <3% SiO_2 by clean up of concentrates and finishing tailings with finish grinding.   V. N. Bednarski

MITROFANOV, S.I.; SOKOLOVA, G.Ye.

Flotation of some minerals with alkyl sulfate. Obog. rud 3
no.6:12-15 '58.   (MIRA 14:8)
                              (Flotation)

SOV/136-59-1-7/24

AUTHOR: Sokolova, G.Ye.

TITLE: Improvement of Lead-Concentrate Quality at the Mirgalimsay Beneficiation Works (Povysheniye kachestva svintsovykh kontsentratov na Mirgalimsayskoy obogogatitel'noy fabrike)

PERIODICAL: Tsvetnyye Metally, 1959, Nr 1, pp 21-26 (USSR)

ABSTRACT: The Mirgalimsay works treat sulphide-oxide lead ores containing barytes giving a concentrate with 35-36% lead and 6.5-7.5% barytes. The lead in the concentrate is 75% as galenite, 21% as perusite, 3% as anglesite and 1% as pirimorphite. The author gives a detailed analysis of the lead concentrate (Table 1) and the distribution of lead, iron and barium by size fractions (Table 2). She discusses the mineralogical compositions of the fractions (investigated by R.D. Kulichikhina) and goes on to describe laboratory work at the works with concentrate from the thickener. The results (Fig 1) show that best results are obtained with 750 g/t of cyanogen flotation agent ("tsianplav"), if the additions are made in portions during repurification; solids in the pulp should not exceed 15%; the pH should be 8-10 and 50 g/tonne of concentrate of any xanthate should be used (Fig 2).

Card 1/3

SOV/136-59-1-7/24

Improvement of Lead-Concentrate Quality at the Mirgalimsay
Beneficiation Works

Flotation tests with first- and second-stage flotation
unthickened concentrates confirmed the relative effective-
ness of using the cyanogen flotation agent
especially in the second repurification (Table 3).
Closed cycle tests with concentrates before and after
thickening according to flow sheets shown in Fig 3 showed
(Table 4) that when the thickened concentrate is used
lead recovery is 4.2% higher than with the unthickened
one. Fig 4 shows the lead-content (%) of the concen-
trate (curve β) and the lead recovery in it (curve ε) as
functions of the yield of concentrate, Fig 5 giving the
corresponding representations for the middlings and
Table 5 the ranges covered. The author discusses the
compositions of products obtained at the different stages
and the distribution of components between size fractions
(Tables 6 and 7), (N.P. Zibinskaya of the works performed
the mineralogical investigation). She recommends a
flowsheet (Fig 6) for dividing Mirgalimsay lead concen-
trate into a rich (50-55% Pb) concentrate and an

Card 2/3

SOV/136-59-1-7/24

Improvement of Lead-Concentrate Quality at the Mirgalimsay
Beneficiation Works

        intermediate product but suggests that improvements in
        the existing treatment at the works should also be
        undertaken.   The work described was directed by
        Professor S.I. Mitrofanov and G.G. Trusova participated.
        There are 6 figures and 7 tables.

Card 3/3

MITROFANOV, S. I.; ROZIN, Ye. Ye.; SOKOLOVA G. Ye.

Effect of certain factors on the dispersion of air in a flotation machine. Sbor.nauch.trud.GINTSVETMENT no.16:102-127 '59.

(MIRA 14:4)

(Flotation—Equipment and supplies)

MITROFANOV, S.I.; SOKOLOVA, G.Ye.

Dressing of Tekeli ores. Sbor.nauch.trud.GINTSVETMET no.16:191-
224 '59.   (MIRA 14:4)
     (Tekeli region (Aktyubinsk Province)—Ore dressing)

SOKOLOVA, G.Ye.

Improving the quality of lead concentrates at one of the ore
dressing plants. Sbor. nauch. trud. Gintsvetmeta no.19:119-129
'62.
(MIRA 16:7)

(Ore dressing—Quality control)   (Lead)

MITROFANOV, S.I.; SOKOLOVA, G.Ye.; KHARITONOV, M.I.; TROFIMOVA, V.I.

Improving the technology of barite recovery at the Mirgalimsay Plant.
TSvet. met. 35 no.6:18-23 Je '62.   (MIRA 15:6)
                    (Mirgalimsay region—Barite)

SOKOLOVA, G.Ye.; MITROFANOV, S.I.

Testing alkyl sulfates for the separation of baryte, calcite and
dolomite. TSvet. met. 35 no.1:16-21 Ja '62.   (MIRA 16:7)
(Flotation--Equipment and supplies)

MITROFANOV, S.I.; SOKOLOVA, G.Ye.; KHARITONOV, M.I.; TROYANOV, D.M.

Producing two barium concentrates for the petroleum and chemical
industries at the Mirgalimsay ore dressing plant. TSvet. met. 38
no.5:9-11 My '65.   (MIRA 18:6)

MANDEL', O.Ye.; SOKOLOVA, I.A.; GRIGOREVSKIY, V.M.

CY Aquarii. Per.zvezdy 13 no.1:62-67 Ap '60.   (MIRA 14:3)

1. Odesskaya astronomicheskaya Observatroiya.
(Stars, Variable)

MANDEL', O.Ye; SOKOLOVA, I.A.; SATANOVA, E.A.

    AB Andromedae. Per.zvezdy 13 no.2:130-136 N '60. (MIRA 14:10)

    1. Odesskaya astronomicheskaya observatoriya.
                    (Stars, Variable)

SOKOLOVA, I.A.

SS Cygni. Per.zvezdy 13 no.4:273-283 Mr '61.   (MIRA 15:3)

1. Odesskaya astronomicheskaya observatoriya.
(Stars, Variable)

ALEKSEYEV, V.Ya.; KONSTANTINOV, A.A.; PEREPELKIN, V.V.; SOKOLOVA, I.A.;
TRISHIN, N.V.

Apparatus for measuring external alpha and beta emissions and
the relative nonuniformity of the distribution of activity
over the surfaces of large distributed alpha and beta emitters.
Trudy inst. Kom. stand., mer i izm. prib. no.69:23-41 '62.
(MIRA 17:8)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut metrologii
im. Mendeleyeva.

POMERANTSEVA, I.V.; MOZZHENKO, A.N.; SOKOLOVA, I.A.; YEGORKINA, G.V.

Use of the "Zemlya" se. mologic station for the study of the struc-
ture of the southeast or the Russian Platform. Dokl. AN SSSR 163 no.1:
171-174   Jl '65.   (MIRA 18:7)

1. Submitted December 8, 1964.

L 06141-67   EWT(1)   GW

ACC NR: AR6017546   SOURCE CODE: UR/0169/66/000/001/G017/G017

AUTHOR: Pomerantseva, I.V.; Mozzhenko, A.N.; Sokolova, I. A.; Yegorkina, G. V,

TITLE: Regional research with seismological stations "Zemlya"   ౽ 7

SOURCE: Ref. zh. Geofizika, Abs. 1G118

REF SOURCE: Tr. Nizhne-Volzhsk. n.i. in-t geol.i geofiz., vyp.2, 1964, 210-219

TOPIC TAGS: Earth, Earth core structure, Earth upper mantle, structure, seismology,
earthquake, seismologic station

ABSTRACT: Results are reported on regional research in the SE of the Russian platform
concerning methodology for the study of the Earth core structure and upper mantle of
the Earth by the seismological stations "Zemlya". With their aid it is possible to re-
cord waves on a magnetic film in a frequency range between .5 and 12 cycles. Rewriting
of the field data at various frequency filtrations permits frequency analysis of the
registered waves. Transformation of frequencies is used with the rewriting, permitting
separation of waves with a fraction of a cycle frequency differences. Amplification of
the station is 600,000 to 1,000,000. With the aid of the station, a reliable registra-
tion of earthquakes with epicentral distances of 11,000 to 14,000 km (Chile, Tonga is-
lands), and explosions of 3t and over at distances of 200-300 km is possible. 1 to 10
events are usually registered during a 24 hour period. Earthquakes with epicentral di-
stances of 200-800 km appear within the Ural region, nearer earthquakes take place wi-

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L 06141-67

ACC NR: AR6017546

thin the Russian platform limits. The obtained records of longitudinal, transverse and exchange waves enable the construction of an idea as to the structure of the Earth core and upper mantle. [Translation of abstract].

SUB CODE: 03, 08/

Card 2/2 phfE.

S/048/61/025/002/006/016
B117/B212

AUTHORS: Konstantinov, A. A., Sokolova, I. A., Sazonova, T. Ye.

TITLE: Determining the fluorescence coefficient of KX-rays of V^{51}, Mn^{55}, Cu^{65}, and Ga^{71}

PERIODICAL: Izvestiya Akademii nauk SSSR. Seriya fizicheskaya, v. 25, no. 2, 1961, 228-232

TEXT: The present paper has been read at the 10th All-Union Conference on Nuclear Spectroscopy and at the 11th Annual Conference on Nuclear Spectroscopy (Riga, January 25 to February 2, 1961). The data on the fluorescence coefficient of KX-rays of $Mn^{55}(Fe^{55})$ have been obtained after the 10th All-Union Conference. To determine the fluorescence coefficient of KX-rays the authors have applied the method of absolute counting of Auger K-electrons and KX-quanta of the radiation source in question. Counting was made by means of a 4π proportional counter. The thin foil to which the radiation source was applied, was made of perchlorovinyl coated with aluminum. Foil and coating had a thickness of together $0.07-0.09$ μ. The emitters

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Determining the fluorescence ...

S/048/61/025/002/006/016
B117/B212

have been applied to the foil by vacuum evaporation of radioactive Cr^{51}, Fe^{55}, Zn^{65}, and Ge^{71} isotopes. The perchlorovinyl foil had been inserted in the 4π counter (Fig. 1) which consisted of two 2π counters. The 4π counter had been filled with methane (20 mm Hg). At such a pressure, practically only Auger electrons are recorded by the counter. The energy distribution of the Ga^{71} Auger-electron spectra which has been obtained from the side facing the radiation source and from both sides combined, exhibit two peaks of the Auger L-K-electrons. A certain number of K-electrons are preserved between those two peaks. These electrons have lost part of their energy inside the source and during reflections of the foil and of the gas filling the counter. The energy distribution of the Auger electrons in the second part of the 4π counter has one peak, only for the K-electrons since the L-electrons are completely absorbed by the foil. The actual absorption factor of Auger K-electrons for the isotopes examined is 4-15% for a 0.07-0.09 μ (8-10 μg cm^{-2}) thick perchlorovinyl foil. The self-absorption factor of Auger K-electrons can be calculated from the actual absorption factor. If a 0.07-0.09 μ thick foil is absorbing 4-15% then the active

Card 2/4

Determining the fluorescence ...

$S/048/61/025/002/006/016$
$B117/B212$

layer with a surface density of 10^{-8} g cm^{-2} will absorb less than 1%. The fluorescence coefficient of KX-rays is determined by the formula

$\omega_K = N_o^X / N_o^X + N_o$ (19). Here, N_o^X is the total number of KX-quanta, N_o is the total number of Auger electrons. By using this formula the fluorescence coefficients have been calculated for

$V^{51}(Cr^{51})$, $Mn^{55}(Fe^{55})$, $Cu^{65}(Zn^{65})$, and $Ga^{71}(Ge^{71})$. (Table). There are 4 figures, 1 table, and 5 references: 1 Soviet-bloc.

Legend to Figure 1: 1) Frame with aluminum foil;
2) polystyrene pipes; 3) counter housing;
4) source; 5) filament of the counter;
6) holder; 7) brass table; 8) cock.
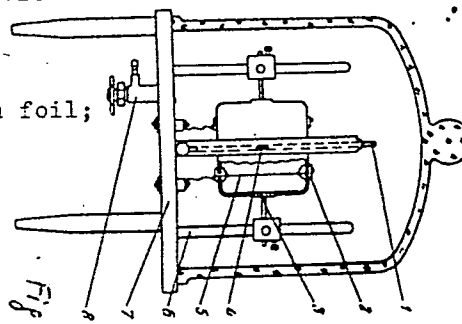
Card 3/4

PUDOVIK, A. N.; ALADZHEVA, I. M.; SOKOLOVA, I. A.; KOZLOVA, G. A.

Polyphosphites. Part 4: Reactions of dialkyl phosphoryl chlorides with glycols. Zhur. ob. khim. 33 no.1:102-107
'63.   (MIRA 16:1)

1. Kazanskiy gosudarstvennyy universitet.

(Phosphoryl chloride)   (Glycols)

GRISHINA, O.N.; SABIROVA, R.Z.; SOKOLOVA, I.A.

Synthesis of dialkyl-phosphinates. Neftekh'miia 4 no.2:320-322
Mr-Ap'64   (MIRA 17:8)

1. Institut organicheskoy khimii AN SSSR, Kazan'.

L 79.30-15   EWT(m)/T/EWP(t)/EWP(b)/EWA(c)   IJP(c)   JD/JG

ACC NR: AP5027907   SOURCE CODE: UR/0189/65/000/005/0042/0047

AUTHOR: Nefedov, A. P.; Sokolovskaya, Ye. M.; Grigor'yev, A. T.; Chechernikov, V. I.;
Sokolova, I. G.; Guzey, L. S.

ORG: Moscow State University (Moskovskiy gosudarstvennyy universitet)

TITLE: Solid-state phase transformations in vanadium-tantalum alloys

SOURCE: Moscow, Universitet. Vestnik. Seriya II. Khimiya, no. 5, 1965, 42-47

TOPIC TAGS: phase transition, vanadium alloy, tantalum alloy, vanadium compound,
tantalum compound

ABSTRACT: The paper is devoted to the determination of the nature of the intermediate
phase of TaV_2 and boundaries of its existence in V-Ta system. The magnetic
susceptibility was measured as a function of composition and temperature. The
temperatures of the start of fusion (solidus temperatures) were determined. Data were
obtained on the differential thermal analysis of alloys of the V-Ta system, and on the
microstructure, hardness, and crystal structure. The results were used to plot a phase
diagram of the system (see Fig. 1).

Card   1/2   UDC: 536.7
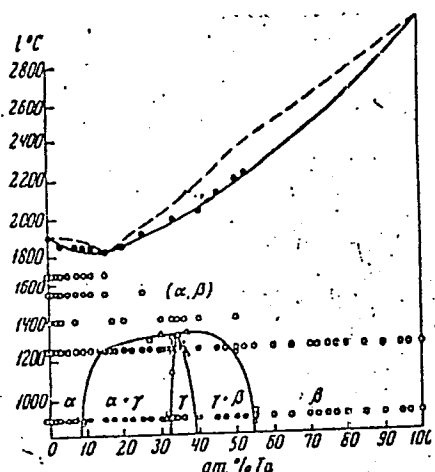
L 7932-66

ACC NR: AP5027907

Fig. 1. Phase diagram of the V–Ta system based on data of this study

It is found that in the region of the stoichiometric composition where the ratio of the components (at. %) V : Ta= 2 : 1, prolonged stepwise annealing (lasting over 1600 hr) induces transformations which may be regarded as a process of ordering with the formation of the intermetallic compound TaV_2. X-ray analysis showed that TaV_2 has a hexagonal structure similar to that of an $MgZn_2$-type Laves phase, and lattice parameters $a = 5.058 \pm 0.005$ Å; $c = 8.250 \pm 0.005$ Å; $c/a = 1.631$, with four formula units per unit cell. Orig. art. has: 7 figures and 3 tables.

SUB CODE: MM,SS / SUBM DATE: 07Jan65 / ORIG REF: 005 / OTH REF: 002

Card 2/2

NEFEDOV, A.P.; SOKOLOVSKAYA, Ye.M.; GRIGOR'YEV, A.T.: SOKOLOVA, I.G.

Phase diagrams of the ternary systems V – Ta – Nb and V –Ta – Mo.
Izv. AN SSSR. Neorg. mat. 1 no.5:715-720 My '65.   (MIRA 18:10)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova,
khimicheskiy fakul'tet.

L 13105-66   EWT(m)/EPF(n)-2/T/EWP(t)/EWP(b)/EWA(c)   IJP(c)   JD/WW/HW/JG

ACC NR: AP5025792   SOURCE CODE: UR/0363/65/001/009/1554/1557

AUTHOR: Kuprina, V. V.; Bataleva, S. K.; Sokolova, I. G.

ORG: Moscow State University im. M. V. Lomonosov (Moskovskiy gosu-darstvennyy universitet)

TITLE: Study of alloys of the zirconium-cobalt system

SOURCE: AN SSSR. Izvestiya. Neorganicheskiye materialy, v. 1, no. 9, 1965, 1554-1557

TOPIC TAGS: zirconium compound, cobalt compound

ABSTRACT: The phase diagram of the zirconium-cobalt system was studied by microscopic and x ray diffraction methods from room temperature up to 950°C. The existence of the chemical compounds ZrCo, Zr_2Co, and Zr_3Co crystallizing from the liquid state and forming broad regions of mechanical mixtures of eutectic and peritectic types was established for the first time and the structure of the compounds was determined. The existence of the chemical compound $ZrCo_2$ was also confirmed. $CoZr$ has a CsCl-type cubic lattice with $a = 3.163 \pm 0.003$ Å. $CoZr_2$ has a $CuAl_2$-type tetragonal lattice with $a = 6.425 \pm 0.003$ Å, $c = 5.726 \pm 0.003$ Å

UDC: 546.831'73

Card 1/2

L 13105-66

ACC NR: AP5025792

and $c/a = 0.860$. $CoZr_3$ has an $MgCd_3$-type hexagonal lattice with $a =$
$= 5.966 \pm 0.003$ Å, $c = 4.660 \pm 0.003$ Å, and $c/a = 0.781$. Orig. art.
has: 1 figure.

SUB CODE: 11/   SUBM DATE: 24Apr65/   ORIG REF: 001/   OTH REF: 007

Card 2/2

ACC NR: AP7010717   SOURCE CODE: UR/0062/66/000/012/2139/2142

AUTHOR: Grishina, O. N.; Sokolova, I. A.

ORG: Institute of Organic Chemistry, Academy of Sciences USSR, Kazan'
(Institut organicheskoy khimii AN SSSR)

TITLE: Sulfides of alkylthionophosphines. Communication 4. Method of
producing ammonium salts of alkyl-N-dialkylamidodithiophosphinic acids

SOURCE: AN SSSR. Izvestiya. Seriya khimicheskaya, no. 12, 1966, 2139-2142

TOPIC TAGS: phosphorus sulfide, ammonium salt, secondary amine,
lubricant additive, insecticide

SUB CODE: 07

ABSTRACT: On the basis of earlier studies in which acid esters of dialkyldithio-
phosphinic acids were produced by the reaction of alkylthionophosphine sulfides
with alcohols possessing a labile hydrogen atom, the authors studied the analogous
reaction between alkylthionophosphine sulfides and amines. The reactions of
butyl- and cyclohexylthionophosphine sulfides with ammonia, primary and secondary
amines, aniline, piperidine, and α-aminopiperidine were studied. A series of
ammonium salts of butyl- and cyclohexylamidodithiophosphinic acids were synthesized.
In the case of diisopropyl- and diisobutylamines and aniline, the reaction stopped
at the formation of the acids, which then showed a great tendency to oxidize in air.
Card 1/2   UDC: 542.958.3 + 661.718.1 + 546.22

ACC NR: AP7010717

to disulfides of alkyl-N-dialkylamidodithiophosphinic acids. Under certain tem-
perature conditions, some of the salts also were oxidized to disulfides. The nickel
salt of cyclohexyl-N-dimethylamidodithiophosphinic acid was produced in quantitative
yield by treating an aqueous solution of the dimethylammonium salt of this acid
with nickel sulfide. The alkyl-N-dialkylamidodithiophosphinic acids and their
ammonium salts synthesized can be used as starting materials in the synthesis of
insecticides and additives to lubricating oils. Orig. art. has: 1 formula
and 2 tables. /JPRS: 40,351/

Card 2/2

SOKOLOVA, I.A.

Hemotransfusion in compound therapy for severe forms of typhoid
fever. Sov. med. 27 no.12:93-96 D'63   (MIRA 17:4)

1. Iz infektsionnogo otdeleriya Yangiyul'skoy gorodskoy bol'-
nitsy (glavnyy vrach I.Kh. Baltabayev, nauchnyy konsul'tant -
doktor med. nauk prof. Sh.Kh.Khodzhayev) ,Tashkentskaya oblast'.

SOKOLOVA, I. B.   DECEASED   1964

NUCLEAR PHYSICS   c. '62

SOKOLOV., I. B.

1945. Novyy podvid nematodirelly Nematodirella longispiculata gazelli subsp. nova. --
Nematody pishchevaritel'nogo trakta dzheyrana. izv. AN Kaz SSR, Seriya
Parazitologicheskaya, v. V.

1926, J nen e lintnaseumy dzheyrmas (blrelet nte aliygara Alha-atlishogo zapvvadeltite, lav. Ir Tadilt, seriya nrraritologicheokara v. 6.

SOKOLOVA, I. B.

20623 Boyev, S.N., Sokolova, I. B. i Bondareva, V. I. K oznakiyu gel'mintofauny arkhara Kazakh stana. Izvestaya Akad. nauk Kazakh. SSR, No. 44, Seriya parasit l; vyp. 6, 1948, s. 85-98. - Rezyu e na Kazakh yaz. - Bibliogr: s. 97-98

SO: LETOPIS ZHURNAL STATEY - Vol. 28, Moskva, 1949

SOKOLOVA, I. B.

2064C Sokolova, I. B.   Novyye nematody (nematodirusy) iz kishechnika dikikh zhvachnykh zhivotnykh Kazakhstana.   Izvestiya Akad. nauk kazakh. SSR, No. 44, Seriya parazitol, Vy . 6, 1948, s. 99-109 – Rezyume na Kazakh. yaz. – Bibliogr: 5 Nazv.

SO: LETOPIS ZHURNAL STATEY – Vol. 28, Moskva, 1949

SOKOLOVA, I. B.

20641 Sokolova, I.B. i Bondareva, V.I. K poznaniyu gel'mintofaun dzheyrana — Gasella
subgutturosa — Alma — Atinskogo zapovednika. Izvestiya Akad. nauk Kazakh. SSR, No. 44,
Seriya parazitol., vyp. 6, 1948, s. 11072. — Rezyume na Kazakh. yaz. — Bibliogr: 8 Nazv.

SO: LETOPIS ZHURNAI STA EY — Vol. 28, Moskva, 1949

BOYEV, S.N.; SOKOLOVA, I.B.

Identification of helminths parasitic on the Asiatic ibex (Capra sibirica) in Kazakhstan. Izv.AN Kazakh.SSR.Ser.paraz. no.7:87-90 '49. (MLRA 9:5)

(Kazakhstan--Worms, Intestinal and parasitic) (Parasites--Ibex)

SOKOLOVA, I.B.; BOYEV, S.N.; BONDAREVA, V.I.

Study of helminths of the saiga in Kazakhstan. Izv.AN Kazakh.SSR.
Ser.paraz. no.7:91-94 '49.   (MLRA 9:5
(Kazakhstan--Worms, Intestinal and Parasitic) (Parasites--Saiga)

SIKLOSI, I. R.

"The Helminthofauna of the Wild Ruminants of Kazakhstan." Cand Biol Sci,
Inst of Zoology, Acad Sci Kazakh SSR, Alma-Ata, 1953. (ZhBiol, No 1, Jan 54)

SO: Sum 432, 2) Mar 55

SOKOLOVA, I.B

1121. Analysis of the helminthic fauna of the wild ruminants of Kazakhstan. I. B. Sokolova *Trud. Inst. Zool. Akad. Nauk Kazakh* S.S.R., 1955, 3, 73—100; *Referat. Zh. Biol*, 1956, Abstr. No. 50125. (Russian). C. C. BARNARD

GALUZO, I.G.; GVOZDEV, Ye.V.; DOLGUSHIN, I.A.; AGAPOVA, A.I.; SOKOLOVA, I.B.; USHAKOVA, G.V. AVAZBAKIYEVA, M.P.; IBRASHEVA, S.I.

V.A.Dogel'; obituary. Vest.AN Kazakh.SSR 11 no.9:89-90 S '55. (MLRA 9:1)
(Dogel', Valentin Aleksandrovich, 1882-1955)

SOKOLOVA, I.B.; LAVROV, L.I.

Helminths of the domestic and wild ungulates in the Caspian Sea
region. Trudy Inst. zool. AN Kazakh. SSR 5:105-111 '56.
(MLRA 9:12)

(Caspian Sea region--Worms, Intestinal and parasitic)
(Parasites--Ungulata)

SOKOLOVA, I.B.

Distribution of beetle mites in the pastures of western Kazakhstan.
Trudy Inst. zool. AN Kazakh. SSR 5:161-165 '56.   (MLRA 9:12)

(West Kazakhstan Province--Mites)

SOKOLOVA, I.B.

Helminths of sheep and goats in Kzyl-Orda Province. Trudy Inst. zool.
AN Kazakh. SSR 9:85-91 '58. (MIRA 11:7)
(Kzyl-Orda Province--Worms, Intestinal and parasitic)
(Parasites--Sheep) (Parasites--Goats)

SOKOLOVA, I.B.

Zygoribatula frisiae as intermediate host to Moniezia benedeni in southern Kazakhstan. Trudy Inst. zool. AN Kazakh. SSR 9:242 '58.

(MIRA 11:7)

(Kazakhstan--Mites as carriers of disease) (Tapeworms)

SOKOLOVA, I. B., BONDAREVA, V. I. and BOYEV, S. N.

"The Comparative Susceptibility of Agricultural and Wild Hooped Animals to Blind Staggers."

Tenth Conference on Parasitological Problems and Diseases with Natural Reservoirs, 22-29 October 1959, Vol. II, Publishing House of Academy of Sciences, USSR, Moscow-Leningrad, 1959.

Kazakh Scientific Research Institute for Veterinary Medicine and the Institute of Zoology, Kazakh Academy of Sciences (Alma-Ata)

SOKOLOVA, I.B.; PANIN, V.Ya.

Intermediate hosts of Moniezia, Thysaniezia, and
Abitellina in Kazakhstan. Trudy Inst.zool.AN Kazakh.
SSR 12:145-149 '60.   (MIRA 13:7)
(Kazakhstan--Cestoda)
(Insects as carriers of disease)

BOYEV, Sergey Nikolayevich, akademik; SOKOLOVA, Iya Borosovna; PANIN,
Viktor Yakovlevich; SHEVCHUK, T.I., red.; LEVIN, M.L., red.;
SOROKINA, Z.P., tekhn. red.

[Helminths of ungulates of Kazakhstan; in two volumes]Gel'-
minty kopytaykh zhivotnykh Kazakhstana; v dvukh tomakh. Alma-
Ata, Izd-vo Akad. nauk Kazakhskoi SSR. Vol.1. 1962. 373 p.
                                        (MIRA 15:10)
1. Akademiya nauk Kazakhskoy SSR (for Boyev).
         (Kazakhstan—Parasites—Ungulata)
      (Kazakhstan—Worms, Intestinal and parasitic)

BONDAREVA, V. I.; BOYEV, S. N.; SOKOLOVA, I. B.

Specific independence of Multiceps skrjabini. Trudy Inst. zool.
AN Kazakh. SSR 16:46-51 '62.   (MIRA 15:10)

(Tapeworms)

SOKOLOVA, I.D.; KRIVOVYAZOV, Ye.L.; TOKREPJENSKAYA, N.K.

Surface tension of alkali metaphosphates and alkaline earth
metaphosphates. Zhur.neorg.khim. 8 no.12:2625-2630 D '63. (MIRA 17:9)

1. Institut obshchey i neorganicheskoy khimii imeni Kurnakova AN
SSSR.

SOKOLOVA, I.D.; SOKOLOV, V.A.

Surface tension of fused salts. Part 1: Methods of measurement.
Zhur.fiz.khim. 34 no.9:1987-1990 S '60.   (MIRA 13:9)

1. Akademiya nauk SSSR, Institut obshchey i neorganicheskoy khimii
im. N.S.Kurnakova.
              (Salts)   (Surface tension)

37628

S/076/62/036/005/002/013
B101/B110

AUTHORS: Sokolova, I. D., and Voskresenskaya, N. K.

TITLE: Surface tension of molten salts. II. Surface tension of the
             systems $BaCl_2$ - NaCl, K_2SO_4 - NaBr

PERIODICAL: Zhurnal fizicheskoy khimii, v. 36, no. 5, 1962, 955 - 961

TEXT: The applicability of V. K. Semenchenko's generalized moments theory
(Poverkhnostnyye yavleniya v metallakh i splavakh (Surface phenomena in
metals and melts) Gostekhizdat. M., 1957) to melts of the systems $BaCl_2$ -
NaCl (I), and K_2SO_4 - NaBr (II), has been investigated. Systems II was
compared with the data found by V. K. Semenchenko, L. P. Shikhobalova (Zh.
fiz. khimii, 21, 613, 707, 1387, 1947) for the system Na_2SO_4 - KBr. The
polytherms for the surface tension of both systems were taken by the
maximum gas bubble pressure method with rising molar parts of NaCl or NaBr,
respectively. The 960°C isotherm was plotted for system I, the 1070°C
isotherm for II. The Guggenheim equation was found to hold for I, but II
showed a major deviation from the value calculated. M. A. Reshetnikov's

Card 1/3

Surface tension of molten...

S/076/62/036/005/002/013
B101/B110

additivity equation, however, holds for both systems:
$\sigma = \sigma_1 + (\sigma_2 - \sigma_1)x/[x + K(1 - x)]$, where σ_1, σ_2 is the surface tension of
the two pure salts, σ that of the mixture containing x molar parts of the
second component. K is constant for the whole range x = 0 - 1. K = 0.74
for the 960°C isotherm of system I, K = 0.54 for system II (1070°C).
Calculation of the adsorption of the surface-active component by the Gibbs
equation gives an adsorption maximum of $17 \cdot 10^{-11}$ g·mole/cm^2 corresponding
to 0.4 molar parts of NaCl for I, and $13 \cdot 10^{-11}$ g·mole/cm^2 corresponding to
0.35 molar parts of NaBr for II. The surface tension of the melts investi-
gated obeys the generalized moments theory of Semenchenko on the assump-
tion that the ions Ba^{2+} and SO_4^{2-}, not the ions $BaCl^+$ and KSO_4^-, prevail in
the melt. The isotherms for the surface tension of the two diagonal
cross sections of the mutual system Na, K $\|$ SO$_4$, Br intersect in the point
corresponding to the equivalent component ratio. There are 3 figures and
2 tables. The most important English-language reference is: J. S. Peake,
M. R. Botwell, J. Amer. Chem. Soc., 76, 2656, 1954.

Card 2/3

Surface tension of molten...

S/076/62/036/005/002/013
B101/B110

ASSOCIATION: Akademiya nauk SSSR, Institut obshchey i neorganicheskoy
khimii im. N. S. Kurnakova (Academy of Sciences USSR,
Institute of General and Inorganic Chemistry imeni
N. S. Kurnakov)

SUBMITTED: July 8, 1960

Card 3/3

KRIVOVYAZOV, Ye.L.; SOKOLOVA, I.D.; VOSKRESENSKAYA, N.K.

Surface tension of nitrite-nitrate and nitrate salt mixtures.
Zhur. prikl. khim. 36 no.11:2542-2543 N '63.

(MIRA 17:1)

KVATER, Ye.I., professor; SOKOLOVA, I.F.

Diagnosis of pregnancy in its early stages.   Sov.med. 17 no.12:
19-23 D '53.   (MLRA 6:12)

1. Iz akushersko-ginekologicheskoy kliniki sanitarno-gigiyeniche-
skogo fakul'teta I Moskovskogo ordena Lenina meditsinskogo insti-
tuta.
                    (Pregnancy--Signs and diagnosis)

1038. BROM-IONOGALVANISM IN PATIENTS WITH TRAUMATIC DISEASE OF
THE BRAIN (Russian text) - Sokolova I. F. - VOPR. KURORT. 1957,
1 (39-42)

The author treated 55 patients who had sustained a closed trauma of the brain with
functional disturbances of the CNS (diminution of active inhibition and change in
cortico-subcortical correlation). Brom-ionogalvanism had a favourable influence
upon the course of traumatic disease of the brain; the electrical activity of the
brain improved. The most favourable results were seen in patients with the asthen-
ic syndrome.

(S)

AUTHORS: M.O. Kliya and Sokolova, I.G.   70-3-2-14/26

TITLE: The Enclosure, by a Growing Crystal, of Drops of an
          Emulsion During Crystallisation from Solutions (Zakhvat
          rastushchim kristallom kapel'emul'sii pri kristallizatsii
          iz rastvorov)

PERIODICAL: Kristallografiya, 1958, Vol 3, Nr 2, pp 219 - 224
                                                    (USSR).

ABSTRACT: The detailed mechanism by which inclusions in crystals
        are formed during crystallisation in an aqueous medium contain-
        ing an oil in emulsion has been examined. The form and
        character of the inclusions is shown to be dependent on the
        amount of wetting of the faces of the crystal by the oil and
        on the normal rates of growth of the faces. The results are
        compared with data on xenogenic inclusions in natural crystals.
        After various trials borax, $Na_2B_4O_7$ and sodium ammonium phos-
        phate, $NaNH_4HPO_4 \cdot 4H_2O$ were chosen. The use of an oil emulsion
        had the advantage that ultraviolet light would produce a
        fluorescence which distinguished the oil inclusions from the
        solution. In borax crystals only inclusions of oil without
        mother liquor formed but with the other material homogeneous
Card1/3 inclusions of mother liquor formed for low rates of crystallis-

70-3-2-14/26
The Enclosure, by a Growing Crystal, of Drops of an Emulsion During
Crystallisation from Solutions

ation but hetereogeneous inclusions when the crystallisation
was rapid. Experiments were carried out on a hot stage between
20 and 70 ^{o}C. Micro-cinematograph records of the entrainment
of oil are reproduced. For borax a linear dependence of the
ratio length/width of the inclusions on the rate of deposition
of material on the crystal faces was found (for rates of 1.5
to 20 u/min). It is concluded that the mechanism of the
formation of inclusions in natural crystals is like that found
here, that is, it began with the sticking of a drop of liquid
carbon dioxide to the surface of a growing crystal. With the
changing physico-chemical conditions, the surface tension and
consequently the wetting power change within very wide limits
and this is especially characteristic of CO_2. Therefore, with

changes in the normal rate of growth of the crystals inclusions
are obtained which contain CO_2 or CO_2 plus mother liquor or

mother liquor only. Acknowledgments to Professor G.G.Lemmleyn.
There are 5 figures and 7 references, 5 of which are Soviet
and 2 German.
Card 2/3

70-3-2-14/26

The Enclosure, by a Growing Crystal, of Drops of an Emulsion During Crystallisation from Solutions

ASSOCIATION: Institut kristallografii AN SSSR
               (Institute of Crystallography, Ac.Sc. USSR)

SUBMITTED: June 21, 1957

Card 3/3

84308

High-temperature Modifications of Chromium and   S/189/60/000/004/004/006
the Phase Diagram of the System Chromium -   B002/B060
Molybdenum in the Region Rich in Chromium

c/a ≈ 1.604; the γ-phase is a body-centered cubic crystal with a lattice
constant similar to the ε-phase; the β-modification is probably a face-
centered cubic crystal. Results obtained from studies of the systems
Cr-Mo, Cr-W, Cr-Nb, Cr-Ta, Cr-Fe, Cr-Ni, Cr-Co, Cr-Fe-Ni, and Cr-Co-Ni,
were communicated to the konferentsiya po zharoprochnym metallam i splavam
(Conference on Heat-resistant Metals and Alloys) in April, 1958, and
April, 1960, as well as to the VIII Mendeleyevskiy s"yezd (8th Mendeleyev
Congress) in March, 1959. There are 2 figures and 2 non-Soviet references.

ASSOCIATION: Kafedra obshchey khimii (Chair of General Chemistry).
                Kafedra neorganicheskoy khimii (Chair of Inorganic Chemistry)

SUBMITTED: April 2, 1960

Card 2/2

GRIGOR'YEV, A.T.; SOKOLOVSKAYA, Ye.M.; SIMANOV, Yu.P.; SOKOLOVA, I.G.;
      MAKSIMOVA, M.V.; PYATIGORSKAYA, L.I.

High-temperature forms of chromium and phase diagram of the system
chromium - iron at high temperatures in the region rich in
chromium. Zhur.neorg.khim. 5 no.9:2136-2138 S '60.
(MIRA 13:11)

1. Moskovskiy gosudarstvennyy universitet, Kafedra obshchey khimii
i Kafedra neorganicheskoy khimii.
      (Chromium)   (Iron)

I

18 1235   1645, 1454

S/078/60/005/011/025/025/XX
87337
B015/B060

AUTHORS: Grigor'yev, A. T.,   Sokolovskaya, Ye. M., Maksimova, M. V.,
              Sokolova, I. G., Nedumov, N. A.

TITLE: Polymorphous Conversions of Chromium in Alloys With Tantalum

PERIODICAL: Zhurnal neorganicheskoy khimii, 1960, Vol. 5, No. 11,
              pp. 2640-2642

TEXT: The authors have established in Refs. 1-5 that chromium appears in
five modifications in its alloys. In addition to data from Refs. 1, 2,
the present article presents the results of a study on the polymorphism
of chromium in the constitution diagram Cr - Ta in the chromium-rich
region. The specimens prepared in previous experiments (Refs. 1, 2) with
0.2 to 12 wt% Ta were examined. In doing so, the authors applied the
thermal method by recording the heating and cooling curves on N. A. Nedumov's
device, and the differential heating curves of annealed alloys (up to 1350°C)
by a ПK-52 (PK-52) pyrometer. Microhardness was measured, and X-ray anal-
yses were made. The constitution diagram (Fig. 1) was drawn on the basis of
microstructural determinations (Fig. 2) and thermal analyses (Table). The

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Polymorphous Conversions of Chromium in
Alloys With Tantalum

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B015/B060

diagram displays five regions of solid solutions formed by the α-, β-, γ-, δ-, and ε-modifications as well as four two-phase regions $\alpha+\beta$, $\beta+\gamma$, $\gamma+\delta$, and $\delta+\varepsilon$ which proceed from the points of mutual transition of the chromium modifications: 1830°C ($\varepsilon \rightleftarrows \delta$), 1650°C ($\delta \rightleftarrows \gamma$), about 1300°C ($\gamma \rightleftarrows \beta$), and about 930°C ($\beta \rightrightarrows \alpha$). Four eutectoid transformations were established in the region of the Cr - Ta constitution diagram at 1490°C, 1150°C, 950°C, and 775°C, which are caused by the eutectoid decomposition of the respective solid solutions. X-ray data of the individual phases agree with those yielded by previous investigations. There are 2 figures, 1 table, and 5 Soviet references.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet, Kafedra obshchey
                khimii (Moscow State University, Department of General
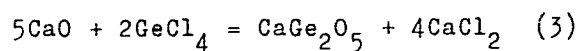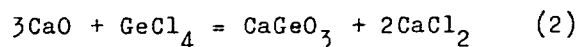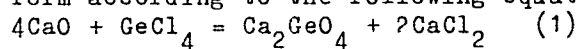   Chemistry)

SUBMITTED: June 6, 1960

Card 2/2

AUTHORS: Yevdokimov, V. I. and Sokolova, I. G.

TITLE: X-Ray Pictures of Reaction Products of Germanium Tetra-
            chloride With Calcium Oxide

PERIODICAL: Zhurnal neorganicheskoy khimii, 1960, Vol. 5, No. 12,
             pp. 2798-2801

TEXT: The reaction products of germanium tetrachloride with calcium oxide
form according to the following equations:

$$4CaO + GeCl_4 = Ca_2GeO_4 + 2CaCl_2 \quad (1)$$

$$3CaO + GeCl_4 = CaGeO_3 + 2CaCl_2 \quad (2)$$

$$5CaO + 2GeCl_4 = CaGe_2O_5 + 4CaCl_2 \quad (3)$$

The reaction product forming at $420°C$ was rehydratized, and X-ray pictures
were taken of the resulting calcium germanate hydrate $(Ca_2GeO_4 \cdot H_2O)$. Table
4 gives the Debye diagram, and compares it with that of the hillebrandite

Card 1/2

X-Ray Pictures of Reaction Products of   S/078/60/005/012/011/016
Germanium Tetrachloride With Calcium Oxide   B017/B064

mineral $(CaSiO_4 \cdot H_2O)$. A comparison of the two Debye diagrams reveals that
calcium orthogermanate and calcium orthosilicate show similar X-ray pic-
tures. Tables 6 and 8 show the X-ray pictures of the reaction products
$CaGeO_3$ and $CaGe_2O_5$ forming at $600°$ and $650°C$, respectively. The X-ray
pictures are compared with those of wollastonite. The X-ray picture of the
product $5CaO \cdot 2GeCl_4$ is similar to that of barium disilicate. Table 9
shows the Debye diagram of the hydration product of $CaGe_2O_5$. The structure
of the ortho-, meta-, and calcium digermanates is similar to the structure
of the ortho-, meta-, and calcium disilicates. V. F. Zhuravlev is men-
tioned. There are 9 tables and 5 references: 2 Soviet, 2 US, and 1 German.

SUBMITTED: September 30, 1959

Card 2/2

GRIGOR'YEV, A.T.; SOKOLOVSKAYA, Ye.M.; SIMANOV, Yu.P.; SOKOLOVA, I.G.;
PAVLOV, V.I.

High-temperature modifications of chromium and the structural diagram
of the system chromium - molybdenum in the region rich in chromium.
Vest. Mosk un. Ser. 2: Khim. 15 no.4:23-24 Jl-Ag '60.   (MIRA 13:9)

1. Kafedra obshchey khimii i kafedra neorganicheskoy khimii Moskov-
skogo universiteta.
         (Chromium)   (Molybdenum)

Sokolova, I. G.

21754   2

18.1255   1496,1474, also 1418   S/078/61/006/005/013/015
                                      B121/B208

AUTHORS: Grigor'yev, A. T., Sokolovskaya, Ye. M., Nedumov, N. A.,
             Maksimova, M. V., Sokolova, I. G., and Ye Tuy Pu

TITLE: Polymorphous conversion of chromium and the phase diagram of
             the system chromium - nickel in the range of concentrated
             chromium

PERIODICAL: Zhurnal neorganicheskoy khimii, v. 6, no. 5, 1961,
             1248 - 1251

TEXT: The alloys of chromium with nickel were studied in the range of
concentrated chromium by microscopic, thermal and X-ray analyses. Ther-
mal analyses were made by recording the heating and cooling curves of the
alloys hardened at 1200°C by means of a ПК-52 (PK-52) pyrometer.
The phase diagram of the system chromium - nickel in the range of concen-
trated chromium was drawn on the basis of microstructural and thermal anal-
yses; it is schematically presented in Fig. 1. Five homogeneous ranges
of the solid solutions of α, β, γ, δ, and ϵ modifications of chromium

Card 1/4

21754

S/078/61/006/005/013/015
B121/B208

Polymorphous conversion of ...

were found which are separated by diphase ranges $\alpha+\beta$, $\beta+\gamma$, $\gamma+\delta$, and $\delta+\epsilon$. Four eutectoid conversions occur at 850, 960, 1140, and 1220°C. X-ray analysis indicated that the solid solution ϵ of the alloy with 17 % nickel has a body-centered cube with a = 2.679 ± 3 kX. In the alloy with 15 % nickel, hardened at 1400°C, with the solid solution $\epsilon+\delta$ the hexagonal lattice of the solid solution of δ with the parameters a = 2.514 kX,

c = 6.445 kX, and $\frac{c}{a}$ = 1.62 was found in addition to the body-centered cube

of the solid solution of ϵ . The alloys with the phases $\alpha+\beta$ and β have a face-centered cube. Alloys with 17 % nickel, hardened at 900°C and more, have a face-centered cube. The results obtained are in good agreement with the data in Refs. 1 - 6 (Ref. 1: A. T. Grigor'yev, L. N. Guseva, Ye. M. Sokolovskaya, M. V. Maksimova. Zh. neorgan. khimii, 4, 2168 (1959). Ref. 2: A. T. Grigor'yev, Ye. M. Sokolovskaya, Yu. P. Simanov, I. G. Sokolova, V. N. Pavlov, M. V. Maksimova. Vesten. MGU, no. 4, seriya II, khimiya, 23 (1960). Ref. 3: A. T. Grigor'yev, Ye. M. Sokolovskaya, Yu. P. Simanov, I. G. Sokolova, M. V. Maksimova, L. I. Pyatigorskaya. Zh. neorgan. khimii, 5, 2136 (1960). Ref. 4: A. T. Grigor'yev, Ye. M. Sokolovskaya, M. V. Maksimova, I. G. Sokolova, N. A. Nedumov. Zh. neorgan.
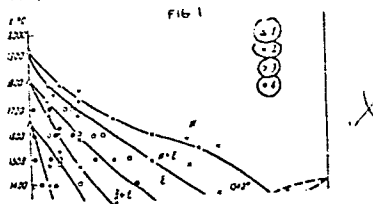
Card 2/4

21754
s/078/61/006/005/013/015
B121/3208

Polymorphous conversion of ...

khimii, 5, 2640 (1960). Ref. 5: A. T. Grigor'yev, Ye Yuy Pu, Ye. M. Sokolovskaya. Zh. neorgan. khimii, 5, 2642 (1960). Ref. 6: A. T. Grigor'yev, Ye. M. Sokolovskaya, A. T. Nefedov, M. V. Maksimova. Testen. MGU (in the press)). There are 2 figures, 1 table, and 14 references: 8 Soviet-bloc and 6 non-Soviet-bloc. The four most recent references to English-language publications read as follows: Ref. 7. M. Hansen, K. Anderko, Constitution of binary alloys, 1958; Ref. 8. D. S. Bloom, N. J. Grant, J. Metals, 3, 1009 (1951); Ref. 9: D. S. Bloom, J. W. Putman, N. J. Grant, J. Metals, 4, no. 6 (1952); Ref. 10: C. Stern, N. J. Grant, J. Metals, 7, 127 (1955).

SUBMITTED: December 8, 1960

Card 3/4

Polymorphic conversion of ...

2175.
s/078/61/006/005/013/015
B121/3208

khimii, 5, 2640 (1960). Ref. 5: A. T. Grigor'yev, Ye Tuy Pu, Ye. M.
Sokolovskaya. Zh. neorgan. khimii, 5, 2640 (1960). Ref. 6: A. T.
Grigor'yev, Ye. M. Sokolovskaya, A. T. Nefedov, M. V. Maksimova. Testen.
NGU (in the press)). There are 2 figures, 1 table, and 14 references:
8 Soviet-bloc and 6 non-Soviet-bloc. The four most recent references to
English-language publications read as follows: Ref. 7. M. Hansen, K.
Anderko, Constitution of binary alloys, 1958; Ref. 8. D. S. Bloom, N. J.
Grant, J. Metals, 1, 1009 (1951); Ref. 9: D. S. Bloom, J. W. Putman,
N. J. Grant, J. Metals, 4, no. 6 (1952); Ref. 10: C. Stern, N. J. Grant,
J. Metals, 7, 127 (1955).

SUBMITTED: December 8, 1960

Card 3/4

FIG 1
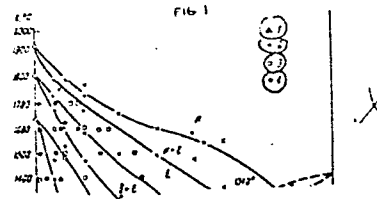
S/659/62/008/000/005/028
I048/I248

AUTHORS: Grigor'yev, A.T., Sokolovskaya, Ye.M., Sokolova, I.G.,
             and Maksimova, M.V.

TITLE: Polymorphous transformations in chromium, and structure
             of the chromium-based solid solution in the system
             chromium-iron-molybdenum

SOURCE: Akademiya nauk SSSR. Institut metallurgii, Issledovaniya
             po zhatoprochnym splavam. v.8. 1962. 42-46

TEXT: An isoplet through the Cr-Mo-Fe system radiating from the Cr
corner and representing a fixed 3:1 (st:wt) Fe:Mo ratio was con-
structed on the basis of microstructural and x-ray analysis data
for 33 different alloys. The total Fe+Mo content of the alloys
studied did not exceed 45%; the alloy specimens were prepared in a
W-arc furnace in argon atmosphere using Ti as the getter, and tem-
pered at 1400-1700°C before the tests. The solidus temperatures
were 1750, 1715, 1640, 1620, and 1620°C for the alloys containing
96, 86, 76, 62, and 58% Cr respectively. Three homogenous regions

Card 1/2

S/659/62/008/000/005/028
I048/I248

Polymorphous transformations...

representing solid solutions based on the ε , δ, and γ modificat-
ions of Cr were found to exist, together with the $\varepsilon + \delta$ and $\gamma + \delta$
two-phase regions; the $\varepsilon + \delta$ region is associated with the $\varepsilon \rightleftharpoons \delta$
transformation at 1830°C, while the $\gamma + \delta$ is associated with the
$\gamma \rightarrow \delta$ transformation at 1650°. The simple ε phase occupies the
region beneath the solidus curve, while the γ phase occupies the
Cr-rich corner at temperatures below 1600°. An x-ray analysis of
the 90% Cr alloy quenched from 1500°C showed that the ε -modificat-
ion possesses a b.c.c. lattice with a≈2.878 kX. There are 4 figures
and 1 table.

Card 2/2

NEFEDOV, A.P.; SOKOLOVSKAYA, Ye.M.; GRIGOR'YEV, A.T.; SOKOLOVA, I.G.;
    NEDUMOV, N.A.

    Phase transitions in the solid state in vanadium-tantalum alloys.
    Zhur.neorg.khim. 9 no.4:883-889 Ap '64.   (MIRA 17:4)

PANTELEYMONOV, L.A.; KHANDIA, aziz Yu.; SOKOLOVA, I.G.; BAGDASAR'YAN, A.Kh.

Nature of transformations taking place in solid solutions of the Bi-Sn system. Vest.Mosk.un.Ser.2:Khim. 19 no.4:45-50 Jl-Ag '64.
(MIRA 18:8)

1. Kafedra obshchey khimii Moskovskogo universiteta.

L 10628-65   EWT(m)/EWP(b)   Pad   RAEM(t)   JD/HW

ACCESSION NR: AP4047647   S/0189/64/000/005/0069/0073

AUTHORS: Panteleymonov, L. A.; Khanna, A. Yu.; Sokolova, I. G.;
Fedoseyeva, T. I.

TITLE: The nature of the transitions in solid solution on a base of Ni_5Sb_2

SOURCE: Moscow. Universitet. Vestnik. Seriya 2. Khimiya, no. 5, 1964, 69-73

TOPIC TAGS: nickel alloy, antimony, solid solution, phase transition/ RKD 57 x ray
camera

ABSTRACT: The authors studied transitions in Ni-Sb alloys by means of differential
thermal analysis, x-ray analysis, Vickers hardness, microstructure, density, and
specific volume. The alloys were prepared in a high-frequency furnace in an atmos-
phere of He with total impurity content below 0.018%. A polymorphous transition was
noted at 890°. At 525° with 27.25% Sb and at 560° with 32% Sb, the compound exhibits
eutectoid decomposition. The curve of Vickers hardness for Ni-Sb compounds has
three breaks, at 23.5, 28.25, and 29.25% Sb, and two minimums at the first two Sb
values. Ni_5Sb_2 corresponds to the segment of 28.25-29.25% Sb. Etching revealed
that the eutectoid with 27% Sb formed delta solid solution on the base of $Ni_{13}Sb_4$

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ACCESSION NR: AP4047647

and beta on Ni_5Sb_2. Ni_5Sb_2 corresponds to a well-defined low on the specific gravity curve and to a maximum on the specific volume curve. X-ray powder photographs, made with an RKD-57 camera using unfiltered copper radiation, indicate a single crystalline phase in annealed samples, with a tetragonal lattice having cell constants of a = 8.766 Å, c = 12.535 Å, and c/a = 1.43. Samples heated at 1050 have a hexagonal lattice with c = 9.3 Å, a = 3.55 Å, and c/a = 2.616. Orig. art. has: 6 figures.

ASSOCIATION: Moskovskiy universitet (Moscow University)

SUBMITTED: 03Mar64   ENCL: 00

SUB CODE: SS, MM   NO REF SOV: 005   OTHER: 001

Card   2/2

L 24484-65   EWT(m)/EPF(n)-2/T/EWP(t)/EWP(b)   Pu-4   IJP(c)/SSD/AFWL/.
ASD(f)-2/ASD(a)-5/ASD(m)-3/AFETR/ RAEM(c)   JD/JG

ACCESSION NR: AP4029188   S/0078/64/009/004/0883/0889

AUTHOR: Nefedov, A. P.; Sokolovskaya, Ye. M.; Grigor'yev, A. T.; Sokolova, I.G.;
Nedumov, N. A.

TITLE: Solid-state phase transformations in vanadium tantalum alloys

SOURCE: Zhurnal neorganicheskoy khimii, v. 9, no. 4, 1964, 883-889

TOPIC TAGS: vanadium tantalum system, system phase diagram, vanadium tantalum
alloy, solid solution, crystal structure, alloy property, alloy phase, vanadium,
vanadium base alloy, vanadium containing alloy, tantalum, tantalum base alloy,
tantalum containing alloy

ABSTRACT: The V-Ta system was studied in view of incomplete' and contradictory
state of the literature. Some 39 alloys containing 0-100% tantalum were sub-
jected to microscopic, thermal and x-ray diffraction analyses, and determina-
tions of hardness, microhardness, specific electric resistance and of the tem-
perature coefficient of electric resistance were made. The phase diagram (Fig.
1) shows that at temperatures above 1300C the alloys of the V-Ta system form a

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ACCESSION NR: AP4029188   O

continuous series of solid solutions. At 1300 ± 10C V$_2$Ta intermetallic com-
pound is formed; at 900C its area of homogeneity extends from 32-39 at% Ta.
At 900C the two-phase area (alpha + V$_2$Ta, V$_2$Ta + beta) extends from 9-52 at%;
at 1250C this area is reduced to 15-45 at% Ta. The curves of the composition
dependence of hardness and specific electric resistance and its temperature
coefficient show a smooth change within the regions of solid solutions and
breaks at 34 at.% Ta corresponding to the region of V$_2$Ta. X-ray diffraction
patterns show the alloy with 34 at.% Ta to consist of one crystalline phase
having a tetragonal lattice, with parameters a = 5.041 A, c = 6.702, and z = 4.
Orig. art. has: 5 figures.

ASSOCIATION: none

SUBMITTED: 18Jul63   ENCL: 01   SUB CODE: MM, SS

NO REF SOV: 004   OTHER: 006

Card 2/3

L 41358-65   EWT(m)/EWP(w)/EPF(c)/EWA(d)/EPR/T/EWP(t)/EWP(b)/EWA(c)   Pr-4/Ps-4
IJP(c)   JD/JG
ACCESSION NR: AP5000499   S/0078/64/009/012/2749/2753

AUTHOR: Panteleymonov, L. A.; Khanna, A. Yu.; Sokolova, I. G.

TITLE: The character of transformations in the range of the solid solution based
on the chemical compound PdAl

SOURCE: Zhurnal neorganicheskoy khimii, v. 9, no. 12, 1964, 2749-2753

TOPIC TAGS: palladium aluminate, thermal alloy transformation, low tempera-
ture alloy modification, high temperature alloy modification, polymorphic
transformation

ABSTRACT: A total of 28 melts with various contents of Pd and Al were prepared
for this study which comprised differential thermal analysis, X-ray, hardness
(Vickers), microstructure, specific weight and volume tests. The alloys were
prepared in a high frequency furnace under helium from chemically pure compounds.
Results of the various tests were in satisfactory agreement. At 855 C the PdAl
compound underwent polymorphic transformation. At 940 C, peritectic reaction
and formation of Pd_2Al_3 was observed. The high-temperature modifie form of

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ACCESSION NR: AP5000499 θ

the PdAl compound had a cubic lattice with cell parameters equal to 3.04 Å. Its
low-temperature modification belonged to one of the lower syngonies. This may
be approximated to a monoclinal lattice with b = 3.431 ± 0.003Å. The physical
properties of the low-temperature modification of the PdAl compound were as
follows: sp. weight 5.962 g/cc, specific volume 0.168 cc/g, hardness according
to Vickers for a 5 kg load 106 kg/mm^2. The hardness curve had 2 minima, at
40 and 50% Pd, corresponding to the formation of Pd_2Al_3 and PdAl, and 4 bends
at 44, 48, 55 and 63% Pd. Two straight curve parts in the range of 44-48 and
55-63% Pd correspond to the $\delta + \gamma$ and $\gamma + \beta$ ranges resp. The γ solid solution
based on PdAl was located between 48 and 55% Pd, at room temperature. The
eutectoid separation of the solid solution on PdAl basis containing 46% Pd occur-
red at 740 C, that with 56% Pd at 540 C. The existence of the compound Pd_2Al_3
was determined; the range of the solid solution on its basis was found in the
39-42% Pd range. The boundary between $\alpha + \beta$ and β solid solutions was found
at 66-66.66 Pd. The desirability of plotting diagrams of composition-density
and composition-specific volume was shown for the purpose of thorough physico-
chemical analysis. The results obtained afford development of the poorly explor-

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L 41358-65
ACCESSION NR: AP5000499 O

ed type of phase diagram in the case where the chemical compound formed by the
initial components undergoes polymorphic transformation and forms a range of
solid solutions on its basis. Orig. art. has: 5 figures

ASSOCIATION: None

SUBMITTED: 02Mar63   ENCL: 00   SUB CODE: IC, GC

NR REF SOV: 004   OTHER: 002

Card 3/3

PANTELEYMONOV, L.A.; KHANNA, Aziz Yu.; SOKOLOVA, I.G.

Pd₂Al - Cu system. Zhur. neorg. khim. 9 no.12:2743-2748 D '64.

Nature of transformations in the region of the solid solution
based on the PdAl chemical compound. Ibid.:2749-2753
(MIRA 18:2)

GRIGOR'YEV, A.T.; SOKOLOVSKAYA, Ye.M.; NEFEDOV, A.P.; SOKOLOVA, I.G.

Effect of molybdenum on transformations in the solid state in alloys of the V - Ta system. Vest. Mosk. un. Ser. 2:Khim.
20 no.4:44-49 Jl-Ag '65.
(MIRA 18:10)

1. Kafedra obshchey khimii Moskovskogo gosudarstvennogo universiteta.

NEFEDOV, A.P.; SOKOLOVSKAYA, Ye.M.; GRIGOR'YEV, A.T.; CHECHERNIKOV, V.I.;
     SOKOLOVA, I.G.; GUZEY, L.S.

Phase transitions in the solid state in alloys of vanadium
with tantalum. Vest. Mosk. un. Ser. 2:Khim. 20 no. 5:42-47
S-0 '65.   (MIRA 18:12)

1. Kafedra obshchey khimii Moskovskogo gosudarstvennogo
universiteta. Submitted Jan. 7, 1965.

L 30231-66   EWT(m)/T/EWP(t)/ETI   IJP(c)   JD/JG

ACC NR: AP6013824   (N)   SOURCE CODE: UR/0189/65/000/006/0057/0062

AUTHOR: Panteleymonov, L. A.; Nesterova, O. P.; Guts, Z. A.; Akhmetzyanov, K. G.;
Sokolova, I. G.

ORG: Chair of General Chemistry, Moscow State University (Kafedra obshchey khimii,
Moskovskiy gosudarstvennyy universitet)

TITLE: Interaction of niobium and ruthenium

SOURCE: Moscow. Univer.itet. Vestnik. Seriya II. Khimiya, no. 6, 1965, 57-62

TOPIC TAGS: ruthenium alloy, niobium alloy, alloy phase diagram, annealing,
crystal lattice structure, x ray analysis

ABSTRACT: Alloys of the niobium-ruthenium system were studied by methods of micro-
scopic and x-ray analyses, hardness and microhardness, and determination of melting
point, electrical conductivity in the 50-700°C range, and thermal conductivity in the
25-500°C range. Homogenized specimens were quenched from 1500° in water after being
kept for 10 hr at this temperature. Annealing was carried out for 1500 hr at 800° in
evacuated quartz ampoules. The phase diagram of the system is given. Visual obser-
vations of the start of fusion of homogenized specimens established that the compound
NbRu melts at 1900°C, a eutectic equilibrium takes place at 1760°C (the eutectic point
corresponds to 66% Ru) and the minimum on the solidus curve is located at about 40% Ru
and 1800°C. X-ray analysis of the alloy corresponding in composition to the compound

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ACC NR: AP6013824   0

NbRu and quenched from 1500° showed the presence of a primitive rhombic lattice with lattice parameters $a=4.351\pm0.005$ Å, $b=4.226\pm0.005$ Å, and $c=3.365\pm0.005$ Å. The alloy with 47% Ru has an ordered tetragonal lattice with $a=3.090\pm0.005$ Å, $c=3.292\pm0.005$ Å, $c/a=1.065$. The alloy with 40% Ru has a body-centered cubic lattice, and the one with 42% Ru, an ordered tetragonal lattice. The alloy containing 76% Ru, quenched from 1700°C, has a hexagonal lattice with $a=8.340\pm0.005$ Å, $c=13.440\pm0.005$ Å, $c/a=1.537$. Hence, the high-temperature modification of ruthenium has a hexagonal lattice (the low-temperature one having a hexagonal close-packed lattice). Orig. art. has: 7 figures.

SUB CODE: 11,20,13/ SUBM DATE: 25Apr65/   ORIG REF: 002/   OTH REF: 004

Card 2/2   CC

L 30229-66   EWT(m)/T/EWP(w)/EWP(t)/ETI   IJP(c)   JD/JG

ACC NR: AP6013825 (N)   SOURCE CODE: UR/0189/65/000/006/0063/0068

AUTHOR: Panteleymonov, L. A.; Nesterova, O. P.; Akhmetzyanov, K. G.; Sokolova, I. G.

ORG: Chair of General Chemistry, Moscow State University (Kafedra obshchey khimii, Moskovskiy gosudarstvennyy universitet)

TITLE: Interaction of ruthenium and tantalum

SOURCE: Moscow. Universitet. Vestnik. Seriya II. Khimiya, no. 6, 1965, 63-68

TOPIC TAGS: ruthenium alloy, tantalum alloy, alloy phase diagram, x ray analysis, hardness, annealing, crystal lattice structure

ABSTRACT: Alloys of the ruthenium-tantalum system were investigated by microscopic and x-ray analyses, measurements of hardness and microhardness, and determination of the melting point and electrical conductivity in the 50-700°C range. Homogenized specimens were quenched in water from 1800, 1500, and 1400°C after being first kept at these temperatures for 10-15 hrs. Annealing in evacuated quartz ampoules lasted 1500 hr. The phase diagram of the system is given. The crystal structures of cast, quenched, and annealed alloys of various Ru contents are described. The microhardness curve showed that the solubility of ruthenium in the compound TaRu at 1800 and 800°C is 21 and 18%, respectively. Visual observation of the start of fusion of homogenized specimens showed that the compound TaRu melts at 2050°C, a eutectic equilibrium takes place at 1950°C (eutectic point at 70% Ru), and the minimum of the solidus curve is

UDC: 669.017.11

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L 46328-66   EWT(m)/T/EWP(t)/ETI   IJP(c)   JD/JG

ACC NR: AP6019776   SOURCE CODE: UR/0370/66/000/003/0183/0192

AUTHOR: Grigor'yev, A. T. (Moscow); Sokolovskaya, Ye. M. (Moscow); Nefedov, A. P.
(Moscow); Sokolova, I. G. (Moscow)

ORG: none

TITLE: Effect of niobium on solid-state transformations in alloys of the vanadium-
tantalum system

SOURCE: AN SSSR. Izvestiya. Metally, no. 3, 1966, 183-192

TOPIC TAGS: vanadium alloy, tantalum alloy, niobium containing alloy, alloy phase
diagram

ABSTRACT: In this paper, which continues their study of the V-Ta system, the authors
attempted to determine the nature of the influence of niobium (which, like vanadium
and tantalum, is an element of group V) on solid state transformations in alloys of
this system, in the region of the metallic compound TaV_2. Both annealed (ordered)
and quenched (from 1000, 1150, 1250, and 1400°C) alloys were investigated by physico-
chemical techniques (microscopic and high-temperature contactless thermal analyses,
hardness and microhardness measurements, determination of temperatures of starting
fusion). On the basis of the data obtained, phase diagrams of the V-Ta-Nb system in
a radial section with a constant ratio (at. %) V:Ta = 2:1 and in two polythermal
sections (with 10 and 5 at. % Nb) were plotted, and the distribution of the phase
regions was established in the ternary system at various temperatures. According to

Card 1/2   UDC: 669.017.13

SOKOLOVA, II

USSR/Cultivated Plants - Grains.   L-2

Abs Jour   : Ref Zhur - Biologiya, No 16, 25 Aug 1957, 69244

Author   : Sokolova, I.I.
Inst   :
Title   : The Influence of Watering Regimen on Growth and Produc-
               tivity of Rice.

Orig Pub   : Kratkie itogi nauch.-issled. rabot za 1955 god, Krasno-
               dar, "Sov. Kuban", 1956, 92-97

Abst   : A study of the relationship of different specimen types
               from VIR collection to the watering regimen proved that
               the best conditions for rice germination are created
               with a short inundation, creating a water layer after
               full sprouting. By sprinkling, the absolute weight of
               the grains is diminished and hollow seeds are increased,
               by comparison with irrigation by inundation.

Card 1/1

KURSHAKOV, N.A.,prof.; RYNKOVA, N.N.; SOKOLOVA, I.I.

Us of ACTH and adrenocortical hormones in patients subjected
to the action of ionizing radiations. Probl.endok. i gorm.
no.2:73-76'63.   (MIRA 16:7)
  (RADIATION SICKNESS) (ACTH) (ADRENOCORTICAL HORMONES)

BABAYANTS, R.S.: BLAGOVESHCHENSKAYA, V.V.; VERGILESOVA, O.S.; VISSONOV, Yu.V.;
VYALOVA, N.A.; GLAZUNOV, I.S.; DRUTMAN, R.D.: KLEMPARSKAYA, N.N.;
KOTOVA, E.S.; KURSHAKOV, N.A., prof.; LAR CHEVA, L.P.; LYSKOVA, M.N.;
MALYSHEVA, M.S.; PETUSHKOV, V.N.; RYNKOVA, N.N.; SOKOLOVA, I.I.;
STUDENIKINA, L.A.; CHUSOVA, V.N.; SHESTIKHINA, O.N.; SHULYATIKOVA,
A.Ya.; SHTUKKENBERG, Yu.M.; BARANOVA, Ye.F., red.

[Acute radiation lesion in man] Ostraia radiatsionnaia travma
u cheloveka. Moskva, Meditsina, 1965. 313 p.

(MIRA 18:9)

1. Chlen-korrespondent AMN SSSR (for Kurshakov).